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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10756,407	01/14/2004	Kouta Fukui	FS-F03223-01	2618
37398	7590	03/23/2005	EXAMINER	
TAIYO CORPORATION 2111 JEFFERSON DAVIS HIGHWAY #412, NORTH ARLINGTON, VA 22202			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,407

Applicant(s)

FUKUI, KOUTA

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Goto (Pub. No.:US 2002/0039707), Siga et al (US Patent No. 4,332,889) and Toya et al (US Patent No. 5,998,126).

Goto discloses a photothermographic material substantially as claimed. The material contains an image forming layer having a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a compound defined as silver saving-agent defined in the present claimed invention. The silver halide includes silver iodobromide and silver iodide. See the photothermographic material on pages 15-19, Example 1; page 5, [0054], [0061]; pages 10-11, [0080] to [0086]. The amount of silver halide and organic silver salts from 0.3 to 2.2 g/m² on page 5, [0059]; and the bisphenol reducing on page 14, [0103]. Siga et al (US Patent no. 4,332,889) disclose a use of silver halide having iodide content at least 30 mole % include silver

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iodide, and silver iodobromide having molar ratio of silver iodide to silver bromide preferably from 30/70 to 98/2, more preferably 50/50 to 95/5 to provide heat developable material with excellence in both stability and sensitivity. See column 6, lines 50-68 and column 2, lines 5-10. Toya et al (US Patent No. 5,998,126) discloses a photographic material containing silver halide having iodide content from 0.1 to 40 mole % and the material is capable to be exposed using laser beam from 300 to 700 nm. See column 16, lines 50-64 and column 2, lines 1-11.

Goto may not exemplified the use of the silver iodide, but suggest the use thereof as an alternative to other silver halide such as silver chloride, silver chlorobromide, silver iodochlorobromide, silver bromide or silver bromiodide. However, the benefit of the use of silver halide having iodide in the heat-developable material has been known in Siga et al to provide a heat-developable with an excellence in both stability and sensitivity. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention selected the silver iodide taught in Goto or the silver halide having high iodide content taught in Siaga et al or Toya et al with a reasonable expectation of achieving a material having excellent in both stability and sensitivity, and thereby provide a material as claimed.

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Katoh (Pu.No. 2001/0038977). Siga et al (US Patent No. 4,332,889) and Toya et al (US Patent No. 5,998,126).

Kato discloses a multilayer photothermographic material a layer containing silver-supplying an organic silver salt, a reducing agent, an organic binder and substantially no photosensitive silver halide and a separate layer containing a photosensitive layer, and the heat-developable material further containing an electron transfer such as hydrazine derivative and alkene

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derivative. The silver halide includes any of silver chloride, silver iodochlorobromide, silver bromide, silver iodobromide, and silver chlorobromide. See pages 35-36, claims 1-15 and page 18, [0086].

Siga et al (US Patent no. 4,332,889) discloses a use of silver halide having iodide content at least 30 mole % include silver iodide, and silver iodobromide having molar ratio of silver iodide to silver bromide preferably from 30/70 to 98/2, more preferably 50/50 to 95/5 to provide heat developable material with excellence in both stability and sensitivity. See column 6, lines 50-68 and column 2, lines 5-10. Toya et al (US Patent No. 5,998,126) discloses a photographic material containing silver halide having iodide content from 0.1 to 40 mole % and the material is capable to be exposed using laser beam from 300 to 700 nm. See column 16, lines 50-64 and column 2, lines 1-11. Katoh may not exemplified the use of the silver iodide, but suggest the use thereof as an alternative to other silver halide such as silver chloride, silver chlorobromide, silver iodochlorobromide, silver bromide or silver bromiodide. However, the benefit of the use of silver halide having iodide in the heat-developable material has been known in Siga et al to provide a heat-developable with an excellence in both stability and sensitivity. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention use silver halide having high iodide content taught in Siga et al or Toya et al with a reasonable expectation of achieving a material having excellent in both stability and sensitivity, and thereby provide a material as claimed. Moreover, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the electron-transfer agent taught in Katoh such as hydrazine derivative or the alkene derivative in either in either layers taught in

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Katoh with a reasonable expectation of improving the image contrast because both layers of contains either silver halide or silver salt of an organic acid.

Conclusion


5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tch tln
March 16, 2005


Thorl Chea
Primary Examiner
Art Unit 1752